Thodoris D Karapantsios

List of Publications by Year
in descending order

129	3,288	172457	182427
papers	citations	29 h-index	51 g-index

133	133	133	2948
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Water sorption isotherms and glass transition temperature of spray dried tomato pulp. Journal of Food Engineering, 2008, 85, 73-83.	5.2	269
2	Equilibrium and kinetic modeling of chromium(VI) biosorption by Aeromonas caviae. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 242, 93-104.	4.7	234
3	Kinetic analysis for the removal of a reactive dye from aqueous solution onto hydrotalcite by adsorption. Water Research, 2003, 37, 3023-3033.	11.3	158
4	Statistical characteristics of free falling films at high reynolds numbers. International Journal of Multiphase Flow, 1989, 15, 1-21.	3.4	127
5	Modeling of the optimum tilt of a solar chimney for maximum air flow. Solar Energy, 2008, 82, 80-94.	6.1	111
6	A CFD methodology for the design of sedimentation tanks in potable water treatment. Chemical Engineering Journal, 2008, 140, 110-121.	12.7	105
7	A conductance probe for measuring liquid fraction in pipes and packed beds. International Journal of Multiphase Flow, 1992, 18, 653-667.	3.4	94
8	Effect of repeated frying on the viscosity, density and dynamic interfacial tension of palm and olive oil. Journal of Food Engineering, 2011, 105, 169-179.	5.2	76
9	Rheological and physical characterization of pregelatinized maize starches. Journal of Food Engineering, 2002, 52, 57-66.	5.2	73
10	Longitudinal characteristics of wavy falling films. International Journal of Multiphase Flow, 1995, 21, 119-127.	3.4	61
11	A critical review of physiological bubble formation in hyperbaric decompression. Advances in Colloid and Interface Science, 2013, 191-192, 22-30.	14.7	58
12	Circulatory bubble dynamics: From physical to biological aspects. Advances in Colloid and Interface Science, 2014, 206, 239-249.	14.7	55
13	Bubbleâ€“particle collision interaction in flotation systems. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 473, 95-103.	4.7	55
14	Performance of a double drum dryer for producing pregelatinized maize starches. Journal of Food Engineering, 2002, 51, 171-183.	5.2	54
15	A nomogram method for estimating the energy produced by wind turbine generators. Solar Energy, 2002, 72, 251-259.	6.1	49
16	Diffusion Kinetic Study of Chromium(VI) Biosorption by Aeromonas caviae. Industrial & Engineering Chemistry Research, 2004, 43, 1748-1755.	3.7	46
17	Diffusion kinetic study of cadmium(II) biosorption byAeromonas caviae. Journal of Chemical Technology and Biotechnology, 2004, 79, 711-719.	3.2	44
18	DESIGN AND TESTING OF A NEW SOLAR TRAY DRYER. Drying Technology, 2002, 20, 1243-1271.	3.1	43

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19	Mass transfer limitations during starch gelatinization. Carbohydrate Polymers, 2003, 53, 53-61.	10.2	43
20	The effect of influent temperature variations in a sedimentation tank for potable water treatmentâ€"A computational fluid dynamics study. Water Research, 2008, 42, 3405-3414.	11.3	43
21	Foam free drainage and bubbles size for surfactant concentrations below the CMC. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 487, 92-103.	4.7	41
22	Properties of polidocanol foam in view of its use in sclerotherapy. International Journal of Pharmaceutics, 2015, 478, 588-596.	5.2	38
23	Water dispersion kinetics during starch gelatinization. Carbohydrate Polymers, 2002, 49, 479-490.	10.2	36
24	CFD Model for the Design of Large Scale Flotation Tanks for Water and Wastewater Treatment. Industrial & Engineering Chemistry Research, 2007, 46, 6590-6599.	3.7	36
25	Purified oleosins at airâ€“water interfaces. Soft Matter, 2013, 9, 1354-1363.	2.7	36
26	A CFD-based simulation study of a large scale flocculation tank for potable water treatment. Chemical Engineering Journal, 2010, 162, 208-216.	12.7	34
27	Evaluation of chemical laboratory safety based on student comprehension of chemicals labelling. Education for Chemical Engineers, 2008, 3, e66-e73.	4.8	33
28	Surface characteristics of roll waves on free falling films. International Journal of Multiphase Flow, 1990, 16, 835-852.	3.4	31
29	Local condensation rates of steam-air mixtures in direct contact with a falling liquid film. International Journal of Heat and Mass Transfer, 1995, 38, 779-794.	4.8	31
30	On the design of electrical conductance probes for foam drainage applications. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 323, 139-148.	4.7	31
31	Bubbles growing in supersaturated solutions at reduced gravity. AICHE Journal, 2004, 50, 2369-2382.	3.6	29
32	Container effects on the free drainage of wet foams. Chemical Engineering Science, 2009, 64, 1404-1415.	3.8	29
33	Effect of the Presence and Absence of Potatoes under Repeated Frying Conditions on the Composition of Palm Oil. JAOCS, Journal of the American Oil Chemists' Society, 2009, 86, 561-571.	1.9	28
34	Effect of potato presence on the degradation of extra virgin olive oil during frying. International Journal of Food Science and Technology, 2010, 45, 765-775.	2.7	28
35	Effect of channel height and mass flux on highly subcooled horizontal flow boiling. Experimental Thermal and Fluid Science, 2017, 83, 157-168.	2.7	28
36	The multiscale boiling investigation on-board the International Space Station: An overview. Applied Thermal Engineering, 2022, 205, 117932.	6.0	28

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37	Effect of initial droplet shape on the tangential force required for spreading and sliding along a solid surface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 549, 164-173.	4.7	27
38	Modeling local flotation frequency in a turbulent flow field. Advances in Colloid and Interface Science, 2006, 122, 79-91.	14.7	24
39	Liquid distribution in horizontal axially rotated packed beds. Chemical Engineering Science, 1993, 48, 1427-1436.	3.8	23
40	A dynamic wicking technique for determining the effective pore radius of pregelatinized starch sheets. Colloids and Surfaces B: Biointerfaces, 2004, 35, 159-167.	5.0	23
41	Smart and green interfaces: From single bubbles/drops to industrial environmental and biomedical applications. Advances in Colloid and Interface Science, 2014, 209, 109-126.	14.7	23
42	Effect of bubble size on void fraction fluctuations in dispersed bubble flows. International Journal of Multiphase Flow, 2015, 75, 163-173.	3.4	23
43	Heat transport to a starch slurry gelatinizing between the drums of a double drum dryer. Journal of Food Engineering, 2002, 54, 45-58.	5.2	21
44	Image analysis of axisymmetric droplets in wetting experiments: A new tool for the study of 3D droplet geometry and droplet shape reconstruction. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 553, 660-671.	4.7	20
45	Water content measurement of thin sheet starch products using a conductance technique. Journal of Food Engineering, 2000, 46, 91-98.	5.2	19
46	Cadmium(II) Biosorption byAeromonas caviae: Kinetic Modeling. Separation Science and Technology, 2005, 40, 1293-1311.	2.5	19
47	Conductive drying kinetics of pregelatinized starch thin films. Journal of Food Engineering, 2006, 76, 477-489.	5.2	19
48	On the use of electrical conductance measurements for the stability of oil-in-water Pickering emulsions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 365, 181-188.	4.7	19
49	Project proposal for the investigation of particle-stabilised emulsions and foams by microgravity experiments. Microgravity Science and Technology, 2006, 18, 104-107.	1.4	18
50	The role of flow in bacterial biofilm morphology and wetting properties. Colloids and Surfaces B: Biointerfaces, 2020, 192, 111047.	5.0	18
51	Bubble dynamics during degassing of liquids at microgravity conditions. AICHE Journal, 2006, 52, 3029-3040.	3.6	17
52	Surface water evaporation and energy components analysis during potato deep fat frying. Food Research International, 2012, 48, 307-315.	6.2	17
53	Effect of adding glycerol and Tween 80 on gas holdup and bubble size distribution in an aerated stirred tank. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 441, 815-824.	4.7	17
54	A critical review on turbulent collision frequency/efficiency models in flotation: Unravelling the path from general coagulation to flotation. Advances in Colloid and Interface Science, 2020, 279, 102158.	14.7	17

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55	Detecting SARS-CoV-2 lineages and mutational load in municipal wastewater and a use-case in the metropolitan area of Thessaloniki, Greece. Scientific Reports, 2022, 12, 2659.	3.3	17
56	Approximate computation of heat sources in axisymmetric microwave heating. AICHE Journal, 2006, 52, 408-413.	3.6	16
57	Interfacial activity of amino acid-based glycerol ether surfactants and their performance in stabilizing O/W cosmetic emulsions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 460, 176-183.	4.7	16
58	Bubble dynamics during the non-isothermal degassing of liquids. Exploiting microgravity conditions. Advances in Colloid and Interface Science, 2007, 134-135, 125-137.	14.7	15
59	Evolution of volume fractions and droplet sizes by analysis of electrical conductance curves during destabilization of oil-in-water emulsions. Journal of Colloid and Interface Science, 2010, 349, 408-416.	9.4	15
60	Bubbly flow characteristics during decompression sickness: Effect of surfactant and electrolyte on bubble size distribution. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 365, 46-51.	4.7	15
61	Effect of potato deep-fat frying conditions on temperature dependence of olive oil and palm oil viscosity. Journal of Food Engineering, 2012, 113, 217-225.	5.2	15
62	On the capacity of a crustâ€“core model to describe potato deep-fat frying. Food Research International, 2012, 46, 185-193.	6.2	15
63	Kerberos : A three camera headed centrifugal/tilting device for studying wetting/dewetting under the influence of controlled body forces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 521, 38-48.	4.7	15
64	Setting Up a Numerical Model of a DAF Tank: Turbulence, Geometry, and Bubble Size. Journal of Environmental Engineering, ASCE, 2010, 136, 1424-1434.	1.4	14
65	A population balance treatment of bubble size evolution in free draining foams. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 473, 75-84.	4.7	14
66	On the thermal inertia of the wall of a drum dryer under a cyclic steady state operation. Journal of Food Engineering, 2003, 60, 453-462.	5.2	13
67	Self-similar growth of a gas bubble induced by localized heating: the effect of temperature-dependent transport properties. Chemical Engineering Science, 2005, 60, 1673-1683.	3.8	13
68	Multicomponent transport studies of crude oils and asphaltenes in DSC program. Microgravity Science and Technology, 2006, 18, 150-154.	1.4	13
69	Decompression induced bubble dynamics on ex vivo fat and muscle tissue surfaces with a new experimental set up. Colloids and Surfaces B: Biointerfaces, 2015, 129, 121-129.	5.0	13
70	Degassing of a pressurized liquid saturated with dissolved gas when injected to a low pressure liquid pool. Experimental Thermal and Fluid Science, 2018, 96, 347-357.	2.7	13
71	Gasâ€“liquid flow of sub-millimeter bubbles at low void fractions: Experimental study of bubble size distribution and void fraction. International Journal of Heat and Fluid Flow, 2018, 71, 353-365.	2.4	13
72	Direct-contact condensation in the presence of noncondensables over free-falling films with intermittent liquid feed. International Journal of Heat and Mass Transfer, 1995, 38, 795-805.	4.8	12

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73	Sizing stand-alone photovoltaic systems. International Journal of Photoenergy, 2006, 2006, 1-8.	2.5	12
74	On a generalized framework for turbulent collision frequency models in flotation: The road from past inconsistencies to a concise algebraic expression for fine particles. Advances in Colloid and Interface Science, 2020, 284, 102270.	14.7	12
75	Two-phase simulations of an off-nominally operating dissolved-air flotation tank. International Journal of Environment and Pollution, 2007, 30, 213.	0.2	11
76	Characterization of Tomato Pulp Stickiness during Spray Drying using a Contact Probe Method. Drying Technology, 2007, 25, 591-598.	3.1	11
77	Study of the formation of micro and nano-droplets containing immiscible solutions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 382, 246-250.	4.7	11
78	A Hybrid Device for Enhancing Flotation of Fine Particles by Combining Micro-Bubbles with Conventional Bubbles. Minerals (Basel, Switzerland), 2021, 11, 561.	2.0	11
79	Investigation of the oscillating bubble technique for the determination of interfacial dilatational properties. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1999, 156, 49-64.	4.7	10
80	Experimental Investigations on Condensation in the Framework of ENhanced COndensers in Microgravity (ENCOM-2) Project. Microgravity Science and Technology, 2014, 26, 335-349.	1.4	10
81	Influence of Newtonian and non-Newtonian fluid behaviour on void fraction and bubble size for a gas-liquid flow of sub-millimeter bubbles at low void fractions. Experimental Thermal and Fluid Science, 2019, 109, 109912.	2.7	10
82	Sessile droplets shape response to complex body forces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 572, 97-106.	4.7	10
83	Nucleation, growth and detachment of neighboring bubbles over miniature heaters. Chemical Engineering Science, 2008, 63, 3438-3448.	3.8	9
84	Evaporation Front Compared with Crust Thickness in Potato Deepâ€Fat Frying. Journal of Food Science, 2012, 77, E17-25.	3.1	9
85	Towards a wicking rapid test for rejection assessment of reused fried oils: Results and analysis for extra virgin olive oil. Journal of Food Engineering, 2013, 119, 260-270.	5.2	9
86	Gas-liquid flow of sub-millimeter bubbles at low void fractions: Void fraction prediction using drift-flux model. Experimental Thermal and Fluid Science, 2018, 98, 195-205.	2.7	9
87	Droplet size distributions derived from evolution of oil fraction during phase separation of oil-in-water emulsions tracked by electrical impedance spectroscopy. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 586, 124292.	4.7	9
88	Associating void fraction signals with bubble clusters features in co-current, upward gas-liquid flow of a non-Newtonian liquid. International Journal of Multiphase Flow, 2020, 131, 103297.	3.4	9
89	Lateral motion and interaction of gas bubbles growing over spherical and plate heaters. Microgravity Science and Technology, 2006, 18, 204-209.	1.4	8
90	Heat transfer from small objects in microgravity: Experiments and analysis. International Journal of Heat and Mass Transfer, 2011, 54, 3323-3333.	4.8	8

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91	Effect of Potato Orientation on Evaporation Front Propagation and Crust Thickness Evolution during Deepâ€Fat Frying. Journal of Food Science, 2012, 77, E297-305.	3.1	8
92	Spatial considerations on electrical resistance tomography measurements. Measurement Science and Technology, 2014, 25, 055303.	2.6	8
93	Wetting of Dehydrated Hydrophilic Pseudomonas fluorescens Biofilms under the Action of External Body Forces. Langmuir, 2021, 37, 10890-10901.	3.5	8
94	A New Method for the Characterization of Electrically Conducting Liquid Bridges. Journal of Colloid and Interface Science, 2000, 227, 282-290.	9.4	7
95	Approximate Solution for a Nonisothermal Gas Bubble Growth over a Spherical Heating Element. Industrial & Engineering Chemistry Research, 2005, 44, 8127-8135.	3.7	7
96	Dynamic Surface Activity of Phenylalanine Glycerolâ^'Ether Surfactant Solutions Measured by a Differential Maximum Bubble Pressure Tensiometer. Langmuir, 2006, 22, 46-51.	3.5	7
97	Load matching in a direct-coupled photovoltaic system-application to Thevenin's equivalent loads. International Journal of Photoenergy, 2006, 2006, 1-7.	2.5	7
98	Soft matter dynamics: A versatile microgravity platform to study dynamics in soft matter. Review of Scientific Instruments, 2021, 92, 124503.	1.3	7
99	A Conductance Study of Reducing Volume Liquid Bridges. Journal of Colloid and Interface Science, 2002, 255, 177-188.	9.4	6
100	Reconstruction of film thickness time traces for wavy turbulent free falling films. International Journal of Multiphase Flow, 2010, 36, 184-192.	3.4	6
101	Two- and three-phase simulations of an ill-functioning dissolved-air flotation tank. International Journal of Environment and Waste Management, 2011, 8, 215.	0.3	6
102	On the identification of liquid surface properties using liquid bridges. Advances in Colloid and Interface Science, 2015, 222, 436-445.	14.7	6
103	Degassing of a decompressed flowing liquid under hypergravity conditions. International Journal of Multiphase Flow, 2019, 115, 126-136.	3.4	6
104	A novel device for in situ study of gas adsorption under rotation. Review of Scientific Instruments, 2021, 92, 045106.	1.3	6
105	SARS-CoV-2 adsorption on suspended solids along a sewerage network: mathematical model formulation, sensitivity analysis, and parametric study. Environmental Science and Pollution Research, 2022, 29, 11304-11319.	5.3	6
106	Wetting and Imbibition Characteristics of Pseudomonas fluorescens Biofilms Grown on Stainless Steel. Langmuir, 2022, 38, 9810-9821.	3.5	6
107	Electrical conductance study of Î¸-liquid bridges. Journal of Colloid and Interface Science, 2006, 302, 597-604.	9.4	5
108	Effect of Liquid Properties on Heat Transfer from Miniature Heaters at Different Gravity Conditions. Microgravity Science and Technology, 2011, 23, 123-128.	1.4	5

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109	Unexpected natural convection heat transfer for small Rayleigh numbers in external geometry. International Journal of Heat and Mass Transfer, 2013, 64, 773-782.	4.8	5
110	Effect of increased gravitational acceleration in potato deep-fat frying. Food Research International, 2014, 55, 110-118.	6.2	5
111	A Theoretical Study of Steady State and Transient Condensation on Axisymmetric Fins Under Combined Capillary and Gravitational Forces. Microgravity Science and Technology, 2016, 28, 559-567.	1.4	5
112	An Advanced Centrifugal Technique to Characterize the Sticking Properties of Tomato Pulp during Drying. Drying Technology, 2007, 25, 599-607.	3.1	4
113	Thermal analysis of pre-boiling regime in frying experiments at several sample orientations and gravity levels. Food and Bioproducts Processing, 2017, 102, 350-361.	3.6	4
114	High-resolution concentration measurement in water/n-butanol binary system by means of high-frequency electrical impedance method. Experimental Thermal and Fluid Science, 2021, 126, 110399.	2.7	4
115	Wetting properties of dehydrated biofilms under different growth conditions. Colloids and Surfaces B: Biointerfaces, 2022, 210, 112245.	5.0	4
116	Characterization of Natural Stone from the Archaeological Site of Pella, Macedonia, Northern Greece. Heritage, 2021, 4, 4665-4677.	1.9	4
117	Aspects of the Two-Layer Model for Direct Contact Condensation of Steam on Wavy Falling Films. Chemical Engineering Communications, 2015, 202, 1535-1546.	2.6	3
118	Contact Angle Profiles for Droplets on Omniphilic Surfaces in the Presence of Tangential Forces. Colloids and Interfaces, 2019, 3, 60.	2.1	3
119	An Innovative Miniature Pulsating Emulsification Device: Flow Characterization and Measurement of Emulsion Stability. Colloids and Interfaces, 2020, 4, 7.	2.1	3
120	Hypergravity to Explore the Role of Buoyancy in Boiling in Porous Media. Microgravity Science and Technology, 2013, 25, 17-25.	1.4	2
121	On the Adequacy of Some Low-Order Moments Method to Simulate Certain Particle Removal Processes. Colloids and Interfaces, 2021, 5, 46.	2.1	2
122	Large wave characteristics and their downstream evolution at high Reynolds number falling films. AICHE Journal, 2010, 56, 11-23.	3.6	1
123	A Note on Liquid Velocities Arising during Decompression Degassing in Hypergravity. Microgravity Science and Technology, 2019, 31, 505-515.	1.4	1
124	Towards an accurate size distribution of emulsion droplets by merging distributions estimated from different measuring methods. Colloids and Interface Science Communications, 2022, 46, 100569.	4.1	1
125	Reply to â€œComment on the Removal Mechanism of Hexavalent Chromium by Biomaterials or Biomaterials-Based Activated Carbonsâ€•(Comment on â€œDiffusion Kinetic Study of Chromium(VI)) Tj ETQq1 1 0.784314 rgBT /Ove 2408-2408.	3.7	0
126	Incorporation of hydrodynamic interaction forces to molecular statistical theory of temporary polymer networks in solution. European Polymer Journal, 2007, 43, 3236-3249.	5.4	0

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127	Generation of micro- and nano-droplets containing immiscible solutions in view of optical studies. , 2010, , .		0
128	4th International Workshop Bubble and Drop Interfaces (B&D2009). Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 365, 1.	4.7	0
129	The COVID-19 pandemic as inspiration to reconsider epidemic models: A novel approach to spatially homogeneous epidemic spread modeling. Mathematical Biosciences and Engineering, 2022, 19, 9853-9886.	1.9	0